

REMARKS

The Examiner's communication dated July 20, 2005 has been received and carefully considered. In conformance with the applicable statutory requirements, this paper constitutes a complete reply and/or a bona fide attempt to advance the application to allowance. Specifically, claims 1 and 5 have been amended. Reexamination and/or reconsideration of the application as amended are respectfully requested.

Summary of the Office Action

Claims 1-12 and 20-22 were objected to for minor informalities.

Claims 13, 14, 17, 20 and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over Komatsu et al. (U.S. Patent No. 6,776,449, which was published as WO02/072373).

Claims 1-12, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Seksaria et al. (U.S. Patent No. 6,672,642) in view of Mark's Handbook, Section 6 (Materials of Engineering, Aluminum and Its Alloys, pp. 6-53 to 6-56).

Claims 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Komatsu et al.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Komatsu et al. in view of Smith (U.S. Patent No. 2,806,735).

Claim Objection(s)

Claim 1, as amended, corrects the Examiner's objection to the "windowless" term. Claims 2-12 and 20-22 were objected to only for their dependency from claim 1 and, in view of the amendment made to claim 1, do not require corrections/amendments to overcome the examiners claim objection(s).

The Claims Distinguish Patentability Over the Reference(s) of Record

Claim 1, as amended, calls for a stamped sheet metal frame having a reinforced cross-sectional shape. As indicated in the Summary section above, the Examiner rejected claim 1, prior to the present amendment, by applying Seksaria et al. (hereinafter, "Seksaria") in view of Mark's Handbook, Section 6 (hereinafter, "Mark's Handbook"). In

particular, the Examiner asserted that Seksaria discloses “a tailgate assembly comprising a frame (35) having a reinforced cross-sectional shape (Fig. 4) with an inner side (downwardly facing side in Fig. 4) facing an associated vehicle’s load-carrying bed and an outer side (upwardly facing side in Fig. 4) opposite the inner side, said frame (35) pivotally connected to a wall forming the vehicle’s open load-carrying bed (Fig. 7 and Fig. 1); and a skin (39) attached to the outer side of the frame.” (Office Action at pg. 4). The Examiner concedes that Seksaria fails to disclose a metal frame, as required by claim 1 (i.e., frame 35 of Seksaria is not disclosed as being metal). (Id. at pg. 5). Also, as discussed in more detail below, the Examiner dismisses the limitation of claim 1 calling for a **stamped sheet** metal frame without applying any prior art references or even alleging that the prior art applied to other aspects of claim 1 discloses such a frame.

In an attempt to overcome the deficient disclosure of Seksaria, the Examiner states the following:

However Seksaria et al. do disclose [sic] that the skin and the cladding are aluminum and the invention is aimed at making the tailgate light weight. And that metal tailgates are well known in the art (column 1, lines 8-12).

Mark’s Handbook, Section 6.4, pp. 6-53 to 6-56, disclose [sic] the advantages of using aluminum are its low density, relative high strength, good corrosion resistance and good working properties (6-53, column 1). Also on p. 6-55 Mark’s Handbook discloses that the 2xxx series of aluminum alloy attain [sic] strengths comparable to steel alloys.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to make the frame of Seksaria of a lightweight metal, such as aluminum.

The motivation would have been to have a light weight tailgate with relatively high strength and good corrosion properties. Another motivation would have been to make the entire tailgate of the same material so that the frame and the skin and cladding all had the same thermal expansion and contraction rates, to prevent rattling of the frame inside the shell of the tailgate and to allow the hinge members to be easily attached to the frame member.

(Office Action at pg. 5).

Applicant asserts that it is entirely irrelevant that Seksaria may disclose a skin and cladding being aluminum. Claim 1 requires the frame to be a stamped sheet metal frame, not the skin or the cladding. Further, the Examiner’s generalization that metal tailgates are well known in the art is also irrelevant with respect to the limitation of claim 1 calling for a

specific tailgate component, i.e., the tailgate frame, to be a stamped sheet metal frame. The undisputed fact that Seksaria fails to disclose a stamped sheet metal frame remains, despite the Examiner's observations on tailgates generally and Seksaria's disclosure of other tailgate components being aluminum. In particular, Seksaria plainly discloses that the plastic reinforcing module 35 (asserted by the Examiner to be the tailgate frame of claim 1) is preferably a one-piece molding of polyester reinforced with glass fibers. Seksaria at col. 5, lines 28-34.

Applicant strongly disagrees with the Examiner's conclusion that it would have been obvious to one of ordinary skill in the art "to make the frame of Seksaria of a lightweight metal, such as aluminum." First, the Examiner's use of Mark's Handbook in addition to Seksaria to render claims 1-5, 9-12, 21 and 22 obvious is specious. Almost any mechanical element of any claim can be found in Mark's Handbook. Second, the motivations to combine certain teachings from Mark's Handbook with the teaching's of Seksaria are flawed. In fact, as discussed more fully below, Applicant asserts that Seksaria teaches away from the combination employed by the Examiner.

As the Examiner is likely aware, Mark's Handbook is a comprehensive single volume work which covers the entire field of mechanical engineering. (See Mark's Handbook at pg. xvii). Thus, a limitation missing from any mechanical related claim is likely to be found in Mark's Handbook in some form or another. The Examiner's citation to Mark's Handbook and its discussion of the advantages of using aluminum are not enough to render claim 1 obvious. The Examiner could look up almost any material in Mark's Handbook and recite the advantages identified in the Handbook. In fact, there are about 205 pages of the Handbook dedicated to engineering materials and their properties. The Examiner has not shown why one skilled in the art would look toward aluminum to the exclusion of other materials discussed in the handbook. In other words, Applicant asserts that it is entirely irrelevant that aluminum and its advantages are discussed in Mark's Handbook. This is not enough to apply Mark's Handbook against claim 1. Moreover, the limitation of claim 1 requiring the frame to be made of sheet metal is missing altogether in the Examiner's use of Seksaria and Mark's Handbook.

Additionally, and perhaps more egregious, the Examiner fails to provide an appropriate and legally adequate motivation to modify Seksaria. A *prima facie* case of obviousness is not established absent proper motivation. Simply because using stamped

sheet metal is generally known, this is not motivation to use a stamped sheet metal frame in connection with the tailgate disclosed by Seksaria. The MPEP is instructive on this point. Per MPEP §2143.01, “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).” In the present case, the Applicant has found no teachings, suggestions or motivation to modify Seksaria as suggested by the Examiner in the reference itself (i.e., in Seksaria). If the Examiner should contend otherwise, Applicant respectfully requests that the Examiner explicitly cite the column and line numbers where such teachings, suggestions or motivation may be found.

According to MPEP §2143.01, the “fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness.” Merely because claimed elements are individually found in the prior art, it does not necessarily follow that it would be obvious to combine the elements from different prior art references. See, MPEP §2143.01, *citing Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). Consequently, absent a motivation to combine or modify the references, it is irrelevant that the elements and/or limitations may be individually or separately known in the prior art. Clearly, the Examiner is motivated to modify Seksaria for no other reason than to arrive at the claimed invention. This is a classic example of impermissible hindsight.

Seksaria discloses a hybrid tailgate 20 including a single sheet metal outer structure 30 and a plastic reinforcing module 35 enclosed by the outer structure 30 (See Fig. 2). The tailgate 20 is purposely designed as a hybrid tailgate, i.e., a tailgate having a sheet metal component 30 and a plastic component 35, as a purported improvement over tailgate structures comprised of a single material. (See Col. 1, lines 60+ and Col. 2, lines 1-34). Thus, Applicant asserts that one skilled in the art would not be motivated to modify the hybrid tailgate 20 of Seksaria back into a tailgate composed of a single material for this reason alone.

Moreover, the Examiner’s provided motivations (which are provided without any support from the reference, Seksaria, being modified or from anywhere else) are

insufficient to show why one skilled in the art would modify the tailgate of Seksaria. First, the Examiner states that motivation would have been to have a light weight tailgate with relatively high strength and good corrosion properties. The hybrid tailgate 20, however, is provided as a lightweight improvement over tailgate structures formed of a single material. Replacing a plastic structure with an aluminum structure is not likely to yield a relatively lighter tailgate. Additionally, Applicant challenges the Examiner's contention that one would modify a plastic element with an aluminum element for corrosion purposes (plastic is most likely less corrosive than aluminum), so no one skilled in the art would be motivated to modify the tailgate 20 for this reason.

If anything, Seksaria teaches away from the modifications proposed by the Examiner. One skilled in the art would not be motivated to modify the tailgate 20 of Seksaria by replacing the plastic reinforcing module 35 with an stamped sheet metal frame, made of aluminum or any other like material. An aluminum module is likely to be heavier than a plastic module which is in direct contrast to a stated objective of Seksaria ("there is a consistent need to further reduce the weight of the tailgate while preferably maintaining the strength and outward appearance of the tailgate." see col. 2, lines 24+). Additionally, the use of plastic is generally superior to aluminum where corrosion is concerned; thus, Seksaria already teaches a more corrosive resistant structure than proposed by the Examiner.

Finally, the Examiner states that motivation (to modify the tailgate 20 of Seksaria) would have been to make the entire tailgate of the same material so that all components of the tailgate would share thermal expansion and contraction rates thereby preventing rattling of the frame inside the shell and to allow hinge members to be easily attached to the frame member. Again, Seksaria is devoted to a hybrid tailgate. Modifying the hybrid tailgate 20 to be of one material would defeat the entire purpose of the Seksaria tailgate 20. Further, the Examiner appears to be manufacturing unrealized problems with the Seksaria tailgate. There is no disclosure of any rattling problems and the Examiner's contention that changing module 35 into an aluminum member would reduce rattling is entirely unsupported. Also, the tailgate 20 is disclosed as being "preferably hingedly attached to the rear corner poses 28,29" of truck 15. Thus, there appears to be no need to modify the tailgate so that it can be hingedly attached.

Concerning the Examiner's refusal to consider the limitation of claim 1 calling for the frame to be a stamped sheet metal frame, Applicant continues to assert that this is a proper structural limitation that must be considered by the Examiner. Even if this limitation rendered claim 1 a product-by-process claim (as alleged by the Examiner, even though claim 1 is clearly an apparatus claim), the MPEP still requires the Examiner to consider any structure implied by the process steps when assessing patentability, particularly where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. As stated in past responses in connection with the present application, a stamped sheet metal frame has distinct structural characteristics and therefore should be considered in assessing the patentability of claim 1. Applicant asserts that the art applied against claim 1 fails to disclose a stamped sheet metal frame.

Accordingly, for at least the reasons discussed in the preceding paragraphs, it is submitted that claim 1 and claims 2-12 and 20-22 dependent from claim 1 are now in condition for allowance.

Dependent **claim 4** calls for the structural cladding of claim 2 to be formed of a sheet molding compound which enables the cladding to be relatively lightweight. The Examiner has rejected claim 4 over Seksaria stating "Seksaria et al. disclose [sic] that the structural cladding (38) is formed of a sheet molding compound which enables the cladding to be relatively lightweight." *Office Action* at pg. 4. However, Seksaria actually discloses that the inner panel 38 is formed from a **metal sheet** 30 and not sheet molding compound.

See Seksaria at col. 5, lines 3-17. There is no disclosure or fair suggestion in Seksaria of a tailgate assembly including a structural cladding formed of a sheet molding compound.

Dependant **claim 5**, as amended, describes with more specificity that the invention of claim 5 has a raised section that extends along the entire edge of the top and bottom edges of the tailgate assembly for increasing the stiffness of the frame and resisting bending of the frame when a load is applied thereto. This now amended claim 5 is distinguished from Seksaria, which only has a raised section that extends along the entire length of one edge.

Dependent **claim 7** calls for the skin of claim 1 to be connected to the frame of claim 1 via welding. Applicant continues to question the Examiner's treatment of claim 7 as a product-by-process claim, particularly when claim 7 further limits the type of attachment between two structural elements introduced in claim 1 (which is directed to a tailgate

assembly). However, even when treated as a product-by-process claim, the MPEP requires the Examiner to consider any structure implied by the process steps “when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product.” See *MPEP* §2113. Section 2113 in the MPEP even provides a specific example which relates to welding and holds that terms such as “welded” are capable of construction as structural limitations. *Id. citing In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979). Accordingly, Applicant asserts that the Examiner cannot summarily dismiss the limitation in claim 7 calling for the skin to be attached to the frame via welding, because welding implies a specific structural characteristic, i.e., how the skin is attached to the frame. Applicant further asserts that, because the references of record fail to disclose or fairly suggest a skin attached to a frame via welding, claim 7 is patentably distinct over the references of record for this reason, in addition to depending from a claim, claim 1, which is also asserted as being patentably distinct over the references of record.

Dependent **claims 20 and 21** depend from independent claim 1. As best can be determined from the Office Action, claim 1 is only rejected under 35 U.S.C. § 103(a) as being unpatentable over Seksaria in view of Marks Handbook, as indicated above. Thus, Applicant contends that dependent claims 20 and 21 cannot be rejected under 35 U.S.C. § 102(b) as anticipated by another third reference, namely, Komatsu et al. See *Office Action at pgs 2-3*. Discussing dependent claims 20 and 21, the Examiner summarily indicates that Komatsu et al. discloses the tailgate assembly of claim 1. This appears to be a typographical error. In any case, Komatsu et al. fails to disclose a stamped sheet metal frame having a painless skin attached to an outer side thereof. For at least these reasons, Applicant requests the Examiner to withdrawal the Komatsu et al. rejections against claims 20 and 21 and claim 1, if applied against claim 1.

Similar typographical errors appear in other places in the Office Action. For example, on page 6 of the Office Action, in reference to claims 15 and 16, the Examiner indicates that Komatsu et al. discloses the tailgate assembly of claim 2. Dependent claims 15 and 16 are, however, dependent from independent claim 13. It appears that the Examiner intended to state that Komatsu et al. discloses the tailgate assembly of claim 13

and mistakenly indicated that it discloses the tailgate assembly of claim 2. As discussed in the preceding paragraph, Applicant contests such an application of Komatsu et al. against claim 2, which is dependent from claim 1. Accordingly, Applicant requests clarification on the rejections of claims 15 and 16. **Claim 13** calls for a sheet molding compound structural cladding adjacent and connected to a raised section of the frame. The Examiner asserts that Komatsu discloses “a sheet molding compound structural cladding (4) adjacent and connected to the raised section (Fig. 3) of the frame (3).” *Office Action* at pgs. 2. The specification of Komatsu, however, fails to support the Examiner’s contention. In particular, Komatsu discloses “a module plate 4 serving as a reinforcing member, which is connected to the outer panel and inner panel 3.” *Komatsu* at Col. 8, lines 22-23. Moreover, Komatsu states that “[t]he outer panel 2, the inner panel 3, and the module plate 4 are made of metal plates....” *Id.* at Col. 8, lines 28-30 (*emphasis added*). Applicant again asserts that a metal module plate does not disclose or fairly suggest a sheet molding compound structural cladding.

As Applicant brought to the Examiner’s attention in response to the Examiner’s previous Office Actions, sheet molding compound (“SMC”) is generally defined as a ready-to-mold material system that combines the reinforcement, thermosetting resin, fillers, pigments, catalysts, and other additives in a continuous sheet that is formable into complex shapes in a single molding step with minimal scrap material. 21 *Kirk-Othmer, Encyclopedia of Chemical Technology* 199 (4th ed. 1997).

Sheet molding compound (SMC) is used in the manufacture of large reinforced compression moldings, which are employed extensively in automotive panels. SMC is prepared as a sandwich, rolled between two polyethylene films; it contains polyester resin, filler (usually, calcium carbonate), and 20-30 wt % chopped glass fibers. Other components such as peroxides for cross-linking, thermoplastic additives for shrinkage control, and alkaline-earth oxides and hydroxides to assist maturation are present in smaller amounts.

21 *Kirk-Othmer, Encyclopedia of Chemical Technology* 199 (4th ed. 1997). While this exact definition of SMC should not be read into claim 13 (nor is the exact definition required to define over the references of record), it is provided as background information for the Examiner and supports Applicant’s assertion that the metal module plate 4 of Komatsu fails

to disclose or fairly suggest a sheet molding compound structural cladding, i.e., a metal plate is not a sheet molding compound structural cladding.

Accordingly, Applicant respectfully submits that claim 13 and claims 14-18 dependent therefrom are patentably distinct over the references of record.

Further, the Examiner takes Official Notice that providing corrugation increases rigidity. *Office Action* at pg. 8. The Official Notice being taken by the Examiner in connection with claim 13 is hereby traversed and/or challenged in accordance with MPEP §2144.03. While Applicant concedes that utilizing corrugation to increase rigidity may be generally known, the Examiner impermissibly concludes without any legitimate support on the record that one would be motivated to include a corrugated section because no load would ever be applied to the cladding member 4. Applicant disagrees and respectfully requests that, in accordance with the obligations imposed under MPEP §2144.03, the Examiner provide a reference or other suitable evidence showing corrugation being applied in the manner claimed.

Yet another ambiguous rejection is contained in reference to independent claim 19. In particular, the Examiner indicates that claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Komatsu et al. in view of Smith, but then goes on to state that Komatsu et al. discloses the tailgate of claims 1-13 and 15-17. Claims 1-13 and 15-17, however, have no direct relationship with claim 19 (i.e., claims 1-13 and 15-17 are neither parent claims nor dependent claims in relation to claim 19). The Examiner indicates that it would have been obvious to one of ordinary skill in the art to allow the tailgate of Komatsu et al. to pivot about a horizontal axis or a vertical axis, as taught by Smith. *Office Action* at pg. 7. The motivation provided by the Examiner is that it would give the truck operator greater versatility in loading and unloading the truck bed. Applicant challenges this motivation and therefore this combination because the tailgate of Komatsu et al. is not a tailgate for use along a truck bed, such as a load carrying bed. The tailgate of Komatsu et al. includes a window section for holding a pane of glass through which passengers of a vehicle can see outside the vehicle. Such a tailgate is unlikely to be employed as a gate in the rear of a load carrying bed. Accordingly, Applicant submits that the combination of Komatsu et al. and Smith is improper and that one skilled in the art would not be motivated to modify Komatsu et al. to function like the tailgate disclosed in Smith. Accordingly, for at least this reason, Applicant submits that claim 19 is in condition for allowance.

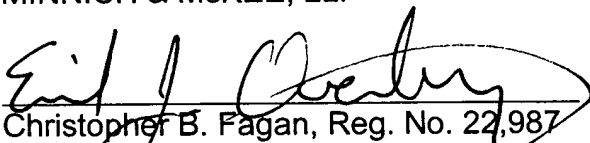
CONCLUSION

All formal and informal matters having been addressed, it is respectfully submitted that this application is in condition for allowance. It is believed that the claim changes clearly place the application in condition for allowance, defining over any fair teaching attributable to the references of record. Alternatively, if the Examiner is of the view that the application is not in clear condition for allowance, it is requested that the Examiner telephone the undersigned for purposes of conducting a telephone interview to resolve any outstanding differences. Accordingly, an early notice of allowance is earnestly solicited.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP

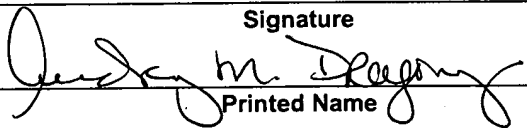
September 30, 2005
Date


Christopher B. Fagan, Reg. No. 22,987
Erik J. Overberger, Reg. No. 48,558
1100 Superior Avenue, Seventh Floor
Cleveland, OH 44114-2579
216-861-5582

CERTIFICATE OF MAILING

Under 37 C.F.R. § 1.8, I certify that this RESPONSE TO OFFICE ACTION is being

- ☒ deposited with the United States Postal Service as First Class mail, addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.
- ☐ transmitted via facsimile in accordance with 37 C.F.R. § 1.8 on the date indicated below.
- ☐ deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated below and is addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Express Mail Label No.:	Signature 
Date September 30, 2005	Printed Name Audrey M. Dragony

N:\HONZ\200012\SLB0000060V001.doc